

# REPORT DOCUMENTATION PAGE

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14. ABSTRACT A symposium on "Molecular Tribology" was held at the National Meeting of the American Chemical Society. The symposium brought together researchers in the field of tribology to present and discuss recent developments in their research. The aspects of tribology covered by the symposium were quite broad but included a number of areas of importance to Air Force technologies including vapor phase lubrication, lubrication of MEMS devices, and tribological properties of thin hard film coatings.					
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**Final Report : ACS Symposium on "Molecular Tribology"**

**P.I.: Andrew J. Gellman**

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Funding has been used to aid in the organization of an international symposium on "Molecular Tribology". There have been a number of exciting developments in our understanding of tribology that have originated over the past few years and several research groups working in the field have been supported by the AFOSR. In order to provide a forum for the presentation and discussion of this work a two and half day symposium on "Molecular Tribology" was held at the 221<sup>st</sup> National Meeting of the American Chemical Society in San Diego, CA. This is the fourth such symposium held at the national ACS meetings over the past eight years. These meetings have provided an excellent venue for symposia on tribology and they have all been well attended. In this case thirty five papers were presented covering a wide variety of topics including lubricant surface chemistry, mechanical measurement of interfacial forces, simulation of sheared interfaces, and others. The attendees included chemists, chemical engineers, materials scientists, and physicists and included a number of foreign contributors. A number of speakers and other attendees were investigators who are either currently being supported by the AFOSR or who have received support in the past. The funds were used to help support the travels costs of a number of the ten invited speakers. A special issue of *Tribology Letters* which is almost in print contains a number of papers originating from the symposium. They provide some details of the material discussed in the symposium and some idea of the contributions of chemical research to the field of tribology.